

CLAIMS:

1. A method of operating a packet network having base stations for communication with mobile units, comprising:

initiating a call involving a group of mobile units,

5 receiving a signal at two or more of the base stations from one of the mobile units,

determining a respective priority parameter for the signal received at each base station,

adding the priority parameters to at least some packets of the respective signals,

transmitting the signals containing the priority parameters to the network,

10 receiving the signals at base stations for transmission to mobile units in the group,
and

transmitting the signal having a selected priority parameter to the mobile units.

2. A method according to claim 1 further comprising ceasing transmission to the network, of a signal received from the mobile unit, after determining that the signal has a
15 priority lower than that of a corresponding signal received from the network.

3. A method according to claim 1 further comprising commencing transmission of a signal to the network, received from the mobile unit, after determining that the signal has a priority greater than that of a corresponding signal received from the network.

4. A method according to claim 3 further comprising the step of waiting for a
20 predetermined time before commencing transmission of the signal to the network.

5. A method according to claim 3 further comprising the step of discarding at least one packet comprising the signal transmitted to the network.

6. A method according to claim 1 wherein the priority parameter is determined by reference to a quality of the respective signal received from the mobile unit, and the signal
25 transmitted to the units is selected according to highest quality.

7. A method according to claim 6 wherein the quality is an error count for part or all of the respective signal received from the mobile unit.

8. A method according to claim 6 wherein the quality is the received signal strength of the respective signal received from the mobile unit.
9. A method according to claim 6 wherein the quality is the signal to noise ratio of the respective signal received from the mobile unit.
- 5 10. A method according to claim 6 wherein the priority parameter of a signal is set to a termination value when the signal ends.
11. A method of operating a packet network having base stations for communication with mobile units, comprising:
- initiating a call involving a group of mobile units,
- 10 receiving signals at two or more of the base stations from two or more of the units,
- determining a respective priority parameter for each of the signals received at a base station,
- adding the priority parameters to at least some packets of the respective signals,
- transmitting the signals containing the priority parameters to the network,
- 15 receiving the signals at base stations for transmission to mobile units in the group,
- and
- transmitting the signal having a selected priority parameter to the units.
12. A method according to claim 11 further comprising ceasing transmission to the network, of each signal received from a mobile unit, that has a priority lower than that of a
- 20 corresponding signal received from the network.
13. A method according to claim 11 wherein the priority parameter is determined by a priority allocated to the two or more units.
14. A method according to claim 11 wherein the priority parameter is determined by reference to a quality of the signals from the two or more of the units.
- 25 15. A method according to claim 14 wherein the quality is an error count for part or all of the signals from the two or more of the units.

16. A method according to claim 14 wherein the quality is the received signal strength of the signals from the two or more of the units.

17. A method according to claim 14 wherein the quality is the signal to noise ratio of the signals from the two or more of the units.

5 18. A communication network or a base station for a network that implements or assists in a method as claimed in any of the preceding claims.